Index of Claims

| Application No. | Applicant(s)              |
|-----------------|---------------------------|
| 09/728,704      | DO ROSARIO BOTELHO ET AL. |
| Examiner        | Art Unit                  |
| DANIEL LASTRA   | 3622                      |

| √ | Rejected |
|---|----------|
| = | Allowed  |

| _ | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| ſ | Interference |

| Α | Appeal   |
|---|----------|
| 0 | Objected |

| Cla   | aim           | n Date   |        |        |  |   | <b>-</b> 1::  | Claim Date                                     |  |      |     |        |          |        | ٠               |               | aim    | Date     |           |               |       |       |          |          |          |           |           |          |          |          |          |           |
|-------|---------------|----------|--------|--------|--|---|---|--|--|------|-----|--------|----------|--------|-----------------|---------------|--------|----------|-----------|---------------|-------|-------|----------|----------|----------|-----------|-----------|----------|----------|----------|----------|-----------|
|       | $\overline{}$ | $\vdash$ |        |        | ΓĪ   | T   |   | 1  | $\neg$   | - :  | ⊪⊦  |        |          |        |                 |               |        |          |           |               | 1     | ⊣     |          | $\vdash$ | П        | Т         | ᅮ         | ale<br>T | ;<br>    | $\neg$   | $\neg$   | $\dashv$  |
| Final | Original      |          |        |        |  |   |   |  |  |      |     | Final  | Original |        |                 |               |        |          |           |               |       | Final | Original | 12/13/04 |          |           |           |          |          |          |          |           |
|       | 1             |          |        |        |  | 一   |   |  |  | 7    |     |        | 51       | П      |                 |               |        | П        | ヿ         |               | 1     |       | 101      |          | П        | T         | 寸         | 7        | $\neg$   | 十        | $\dashv$ | $\exists$ |
|       | 2             | Г        | П      |        |  | 寸   | $\neg$  | $\neg$   | $\neg$   | 7    | ľ   |        | 52       | П      | 7               |               | T      | Ħ        | 寸         | $\dashv$      | 1     |       | 102      |          | Ħ        | $\dashv$  | 7         | 寸        | ┪        | 十        | 十        | $\dashv$  |
|       | 3             |          |        |        |  | T   | 一   | $\neg$   |  | 7    |     |        | 53       | П      |                 |               | 1      | Ħ        | 寸         |               | 1     |       | 103      |          | Ħ        | $\neg$    | $\neg$    | _        | $\dashv$ | 十        | 十        | ᅥ         |
|       | 4             | Г        |        |        |  |   |   |  |  | 7    | ľ   |        | 54       | П      |                 | $\neg$        | 1      | H        | T         | $\top$        | 1     |       | 104      | $\vdash$ | П        | 7         | 7         | $\dashv$ | T        | $\dashv$ | 十        | $\dashv$  |
|       | 5             |          | П      |        |  |   |   | ヿ  |  | 7    | ı   |        | 55       | П      | $\neg$          |               | 1      | П        | $\dashv$  |               | 1     |       | 105      | Т        |          | 7         | 7         | 7        | T        | $\top$   | 十        | ╛         |
|       | 6             |          |        |        |  |   | 寸   | T  |  | 7    | ı   |        | 56       | П      | 一               | $\neg$        | T      |          | $\exists$ |               | 1     |       | 106      |          | Ħ        | 寸         | _         | T        | 7        | 十        | 十        | $\dashv$  |
|       | 7             |          |        |        |  |   | T   |  |  | 7    | ľ   |        | 57       |        |                 | $\top$        |        |          | ヿ         |               | 1     |       | 107      | 1        |          | ヿ         | 寸         | 寸        | $\neg$   | 十        | $\dashv$ | $\dashv$  |
|       | 8             |          |        |        |  |   | $\neg$  |  |  | 7    |     |        | 58       |        |                 | $\neg \vdash$ |        |          |           |               | 1     |       | 108      | 1        | Ħ        | ヿ         | $\neg$    | T        |          | 十        | 十        | ╛         |
|       | 9             |          |        |        |  |   |   |  | $\Box$   |      |     |        | 59       |        | $\neg$          | $\neg$        | Ī      |          |           |               | 1     |       | 109      |          |          | $\neg$    |           | T        | T        | $\neg$   | 十        | $\neg$    |
|       | 10            |          |        |        |  |   |   | T  |  |      |     |        | 60       |        |                 | 丁             |        |          |           |               |       |       | 110      |          |          | 寸         | 寸         | 寸        | 寸        | $\neg$   | 十        | ╛         |
|       | 11            |          |        |        |  | $\Box$  | ヿ   | 丁  | $\neg$   | 7    | Ī   |        | 61       |        |                 |               | 1      | П        |           |               | 1     |       | 111      |          | $\dashv$ | 7         | _         |          | $\dashv$ | $\top$   | 十        | ╗         |
|       | 12            |          |        |        |  |   | T   | $\neg$   | $\neg$   | 7    | ſ   |        | 62       | ı      |                 | $\neg \vdash$ | 1      | $\Box$   | $\neg$    |               | 1     |       | 112      |          |          | 十         | _         | $\dashv$ | 寸        | 十        | 十        | $\neg$    |
|       | 13            |          |        |        |  |   |   |  |  |      | Ī   |        | 63       |        |                 |               | 1      |          |           |               | 1     |       | 113      |          |          | $\neg$    | T         |          | ヿ        | 十        | $\top$   | ヿ         |
|       | 14            |          |        |        |  |   |   |  |  |      | ľ   |        | 64       | $\Box$ | $\dashv$        | $\top$        | T      |          | 一         | 1             | 1     |       | 114      |          |          | $\dashv$  | 7         | 一        | $\dashv$ | 十        | 十        | ᅥ         |
|       | 15            |          |        |        |  | $\Box$  | П   | T  | П  | _ ;; |     | T      | 65       |        | 一               |               | T      |          |           |               | 1     |       | 115      |          |          | $\dashv$  | 寸         | 寸        | +        | $\dashv$ | 十        | T         |
|       | 16            |          |        |        |  |   | $\neg$  | T  |  |      |     |        | 66       |        | $\neg$          |               | 1      | H        | $\dashv$  | _             | 1     |       | 116      | _        |          | _         | 7         | $\dashv$ | 十        | 十        | 十        | ㅋ         |
|       | 17            |          |        |        |  | $\neg$  |   |  | $\neg$   | _    | Ī   |        | 67       |        | T               |               | 1      | П        | 寸         | $\neg$        | 1     |       | 117      |          | $\dashv$ | +         | $\dashv$  | _        | $\dashv$ | +        | 十        | ᅱ         |
|       | 18            |          |        |        | $\Box$   | $\exists$   |   |  |  |      | Ī   |        | 68       |        | T               | 十             | Ť      | $\Box$   | $\dashv$  | $\dashv$      | 1     |       | 118      |          | 十        | +         | _         | $\dashv$ | 十        | +        | 十        | ᅱ         |
|       | 19            |          |        |        |  |   | 丁   |  | $\neg$   | 7    | -   |        | 69       |        | T               |               | 1      | П        | $\dashv$  | _             | 1     |       | 119      |          | $\neg$   | $\dashv$  | ✝         | _        | 十        | -        | 十        | $\dashv$  |
|       | 20            |          |        |        |  |   | ヿ   |  |  |      | -   |        | 70       |        | T               |               | $\top$ | H        | +         | $\neg$        | 1     |       | 120      |          |          | 十         | 寸         | $\dashv$ | $\dashv$ | -        | $\pm$    | $\dashv$  |
|       | 21            |          |        |        |  | 一   | ┪   | 寸  |  | 7    | -   |        | 71       | ヿ      | _               | $\dashv$      | $\top$ |          | 十         | $\neg$        | 1     | _     | 121      |          | 1        | ナ         | 7         | $\dashv$ | +        | $\dashv$ | +        | $\dashv$  |
|       | 22            |          |        |        | $\neg$   |   | $\neg$  | _  | T  | 7    | -   |        | 72       | $\neg$ | $\top$          | $\dashv$      | $\top$ | $\vdash$ | 十         | -             | 1     |       | 122      |          | _        | 十         | 7         | $\dashv$ | +        | +        | $\dashv$ | $\dashv$  |
|       | 23            |          |        |        | T  | 1   |   | _  | T  |      | -   |        | 73       |        | 1               |               | 十      | H        | $\dashv$  | $\top$        | 1     |       | 123      |          |          | $\dashv$  | _         | $\dashv$ | _        | +        | +        | $\dashv$  |
|       | 24            |          |        |        | $\neg$   |   |   | _  |  | 78   | -   |        | 74       |        | $\neg$          | _             | +      | H        | $\dashv$  | _             | 1     |       | 124      |          | $\neg$   | 寸         | ┪         | $\dashv$ | 十        | _        | +        | ᅱ         |
|       | 25            |          |        |        | ヿ  | $\neg$  |   | $\neg$   |  | 7    | ľ   |        | 75       |        | $\dashv$        |               | 1      | П        | 寸         | $\top$        | 1     |       | 125      |          | $\neg$   | $\forall$ | 寸         | $\dashv$ | $\dashv$ | $\dashv$ | 十        | ᅥ         |
|       | 26            |          |        |        | $\neg$   | 一   | $\neg$  | $\neg$   |  |      | ŀ   |        | 76       |        | $\top$          | $\neg$        | T      | H        | $\dashv$  |               | 1     |       | 126      |          | $\neg +$ | 十         | $\dashv$  | 十        | $\dashv$ | $\dashv$ | $\dashv$ | ᅱ         |
|       | 27            |          |        |        |  |   |   | 一  | $\top$   | 7.   |     |        | 77       |        | _               | $\top$        | 1      | $\vdash$ | $\dashv$  | $\vdash$      | 1     |       | 127      |          | T        | +         | $\dashv$  | _        | 十        | $\dashv$ | $\dashv$ | ᅱ         |
|       | 28            |          |        | $\neg$ |  |   | T   |  |  |      | ı   |        | 78       | T      |                 | 十             | 1      | H        | 十         | 十             | 1     |       | 128      |          | T        | 十         | 1         | 十        | $\top$   | 十        | 十        | ᅥ         |
|       | 29            |          |        |        | $\neg$   |   | T   |  |  |      | ı   |        | 79       | $\neg$ | $\top$          | _             |        | H        | ヿ         | $\top$        | 1     |       | 129      |          |          | Ť         | 7         | ヿ        | $\dashv$ | $\dashv$ | 十        | ᅱ         |
|       | 30            |          |        |        | T  |   | T   | 丁  | $\neg$   | 7    |     |        | 80       |        |                 | ╅             | 1      | $\Box$   | T         | $\neg$        | 1     |       | 130      |          | $\neg$   | す         | 7         | 十        | $\top$   | 十        | 十        | ㅓ         |
|       | 31            |          |        |        |  | T   |   | T  | $\neg \uparrow$                                | 7    | ľ   |        | 81       |        |                 | 十             | 1      |          | $\neg$    |               |       |       | 131      |          | $\neg$   | 十         | ┪         | 寸        | 寸        | $\dashv$ | +        | ᅦ         |
|       | 32            |          |        | ı      |  |   | Ì   | 1  | $\neg \uparrow$                                |      | ľ   |        | 82       |        | 7               |               | T      | П        | $\neg$    |               |       |       | 132      |          | _        | $\dashv$  | $\dashv$  | $\dashv$ | 十        | $\neg$   | 十        | ㅓ         |
|       | 33            |          |        |        | T  |   | T   |  |  |      |     | $\neg$ | 83       |        |                 |               |        |          | 十         | $\neg$        |       |       | 133      |          |          | $\dashv$  | 寸         | 十        | 寸        | $\neg$   | 十        | ㅓ         |
|       | 34            |          |        |        |  |   |   |  |  |      |     | コ      | 84       |        |                 |               |        |          | 寸         | $\top$        | 1     |       | 134      |          | _        | 十         | 寸         | 7        | 7        | $\top$   | 十        | ᅥ         |
|       | 35            |          |        |        |  |   |   |  | Т  |      |     |        | 85       | Ī      | $\top$          | $\neg$        |        | П        |           |               | 1     |       | 135      |          |          | 十         | 7         | $\neg$   | T        | $\top$   | 十        | ┪         |
|       | 36            |          |        |        |  | П   |   | Ī  | Т  |      | ijΓ |        | 86       | $\neg$ |                 |               |        | П        |           | $\top$        | 1     |       | 136      |          |          | 十         | 寸         | $\top$   | 十        | $\neg$   | 十        | ┪         |
|       | 37            |          |        |        |  | П   | П   |  |  |      | ij٢ |        | 87       | $\neg$ | $\neg \uparrow$ |               |        |          | T         | $\top$        | 1     |       | 137      |          | T        | $\dashv$  | 十         | $\top$   | 十        | 十        | $\top$   | ヿ         |
|       | 38            |          |        |        |  |   | $\neg$  |  |  |      |     |        | 88       | 一      | $\neg$          | Т             | 1      |          |           |               |       |       | 138      | $\neg$   | 十        | $\top$    | $\dashv$  | 十        | 十        | 十        | 十        | ヿ         |
|       | 39            |          |        |        |  |   | Т   | $\neg$   |  | 7    | ľ   |        | 89       | $\neg$ |                 | Т             | Ť      |          |           |               |       |       | 139      |          | 一        | T         | 寸         | 十        | 7        | 十        | 十        | ヿ         |
|       | 40            |          |        |        | _]   |   |   |  |  |      |     |        | 90       | 寸      | T               |               | 1      | П        | 1         |               |       |       | 140      | $\neg$   | 十        | $\dashv$  | $\top$    | 十        | $\dashv$ | 十        | +        | ᅥ         |
|       | 41            |          |        | ┚      |  | $\Box$  | $\Box$  |  |  |      |     | 1      | 91       |        |                 |               | 1      | П        | $\neg$    | $\neg \vdash$ | 1     |       | 141      | $\neg$   | 寸        | $\top$    | $\top$    | 十        | +        | $\top$   | 十        | ٦         |
|       | 42            |          |        |        | $oldsymbol{\mathbb{J}}$  | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | $\Box$  | $_{ m T}$                                      | $\Box \Gamma$                                  |      | ľ   |        | 92       | 1      | $\top$          | T             | T      | П        | $\top$    | $\top$        | 1     |       | 142      | $\neg$   | $\neg$   | $\top$    | $\dagger$ | 十        | $\top$   | 十        | $\top$   | ٦         |
| I     | 43            |          |        |        | $oldsymbol{ol}}}}}}}}}}}}}}}}$ | $\Box$  | $oldsymbol{ol}}}}}}}}}}}}}}}$ | $\Box$   | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$ |      |     |        | 93       |        |                 |               |        | П        | $\neg$    |               |       |       | 143      | ヿ        | $\dashv$ | $\top$    | 寸         | $\top$   | 1        | 十        | 十        | ヿ         |
|       | 44            |          |        |        |  |   |   |  |  |      | Γ   |        | 94       |        |                 |               | Γ      | П        | $\dashv$  |               | 1     |       | 144      | 一        | $\top$   | 1         | 十         | 十        | 十        | 十        | 十        | ᅥ         |
| I     | 45            |          |        |        |  |   |   | J  | I  |      |     |        | 95       | $\neg$ | $\neg$          | T             | 1      | П        | $\top$    | $\top$        | 1   1 |       | 145      | 一        | _        | 十         | $\top$    | Ť        | $\top$   | 十        | 十        | ヿ         |
| T     | 46            |          | $\Box$ |        | $_{\perp}$ T   | $\Box$  |   | T  | ╗  |      | Γ   |        | 96       | $\Box$ |                 | $\top$        | Т      | П        | 1         | $\top$        | 1     |       | 146      | $\neg$   | $\dashv$ |           | $\top$    | 十        | $\dashv$ | 十        | 十        | ヿ         |
|       | 47            | ]        | $\Box$ |        | $\Box$   |   |   |  | $oldsymbol{\mathbb{T}}$                        |      | Ш   |        | 97       |        |                 |               |        |          | す         | $\top$        | 1     |       | 147      | 一        | $\top$   | _         | $\dagger$ | 十        | $\top$   | 十        | 十        | ㅓ         |
| I     | 48            | I        | $\Box$ | J      | $oxed{J}$  | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$    | $oldsymbol{ol}}}}}}}}}}}}}}}$ | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$ | floor  |      | #[  |        | 98       |        |                 |               |        |          | 丁         | $\top$        |       |       | 148      |          | $\dashv$ | $\top$    | $\dagger$ | 十        | 十        | $\top$   | 十        | ヿ         |
| 1     | 49            | $\Box$   | $\Box$ | $\Box$ |  | $\Box$  | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$   | $\prod$  | $\Box$   |      | Ξſ  | $\Box$ | 99       |        | T               |               |        | $\sqcap$ | $\top$    | $\top$        | 1     |       | 149      |          | $\top$   | $\top$    | $\dagger$ | $\top$   | $\top$   | 十        | 十        | ٦         |
|       | 50            | $\Box$   | T      | T      | T  | T   | T   | T  |  | 7::: | ïГ  |        | 100      |        | T               | 1             | Т      |          | T         | _   _         | 1     |       | 150      | $\neg$   | $\dashv$ | $\top$    | $\top$    | 十        | +        | +        | +        | ⊣         |